

## ABSTRACT OF THE DISCLOSURE

The present invention offers a laser oscillator device having sufficient cooling ability to maintain a lasing medium which generates high-density thermal energy at a temperature appropriate for use, while being capable of being made compact. The laser oscillator device comprises an excitation beam source for generating an excitation beam, a laser medium for receiving the excitation beam and performing optical amplification, a laser oscillator device for causing resonance of light emitted by the laser medium for laser oscillation, and a cooling system for cooling said laser medium, wherein the cooling system uses a gas as the heat-carrying medium.